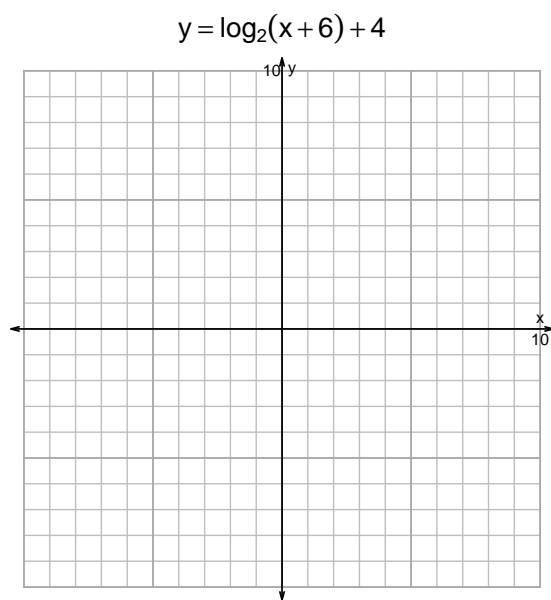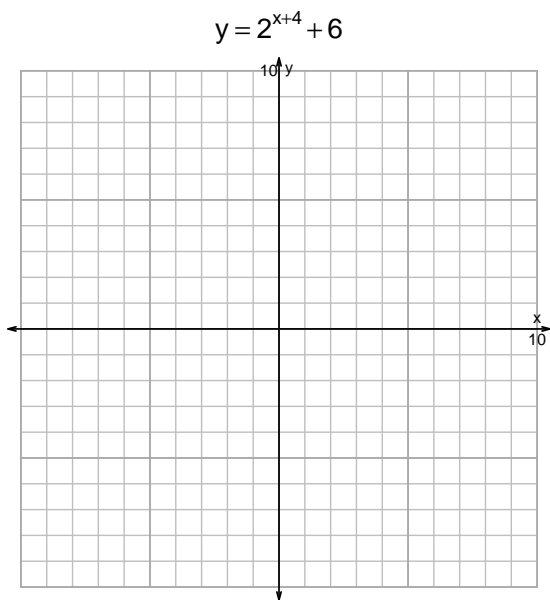Name: _____                                    Date: _____
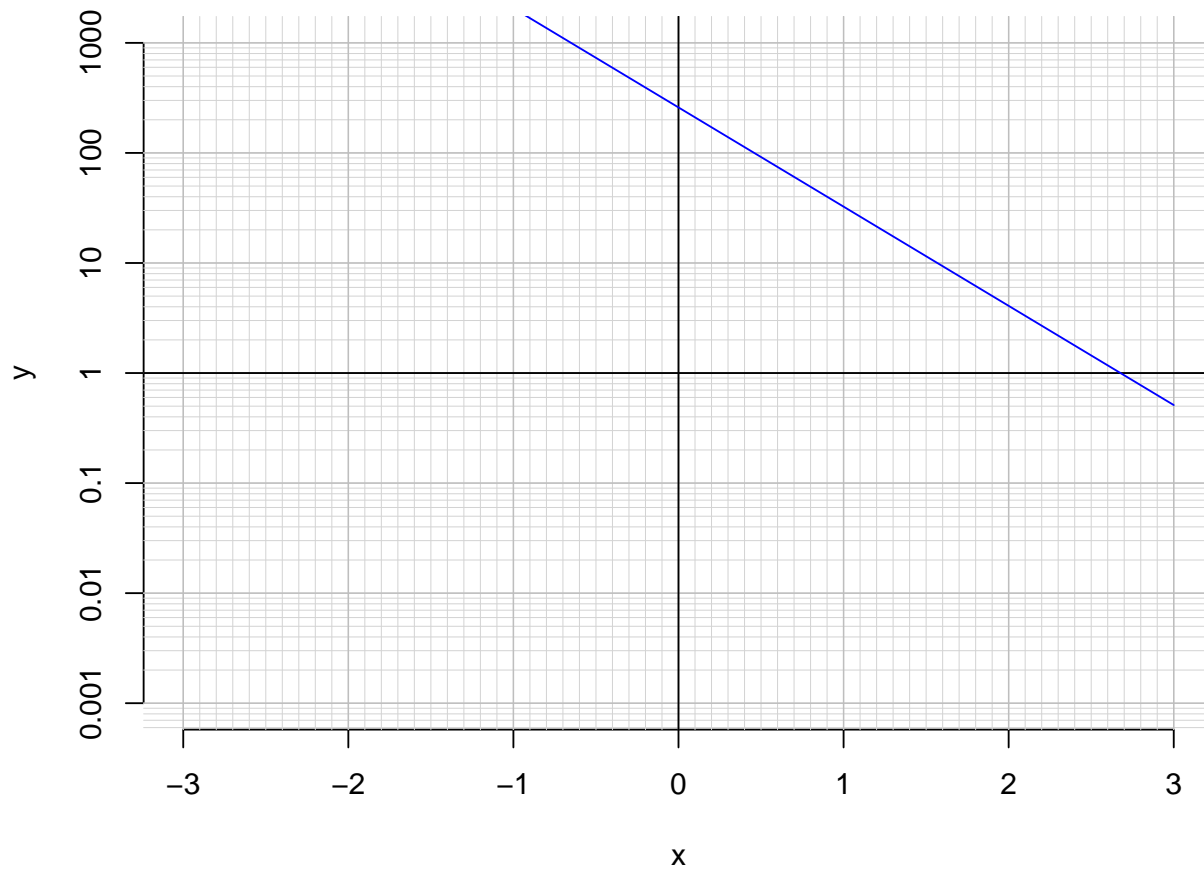
## s18quiz: EXP LOG (QUIZ v274)

1. Graph $y = 2^{x+4} + 6$ and $y = \log_2(x+6) + 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$y = 2^{x+4} + 6$



$y = \log_2(x+6) + 4$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-23 = \left(\frac{-4}{3}\right) \cdot 2^{7t/5}$$

3. An exponential function $f(x) = 259 \cdot e^{-2.08x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(0.9)$.

b. Express $f^{-1}(x)$, the inverse of $f$.

c. Using the plot above, evaluate $f^{-1}(900)$.